ABSTRACT

[0088]   Techniques are provided to manage interference for soft handoff and broadcast services in a wireless frequency hopping communication system (e.g., an OFDMA system). These techniques may be used for the forward and reverse links. In a first scheme, an FH function $f_{sho}(r,T)$ is used for soft-handoff users, an FH function $f_{s_i}(k,T)$ is used for users not in soft handoff in each sector s_i, and the FH function $f_{s_i}(k,T)$ is modified to be orthogonal to the FH function $f_{sho}(r,T)$ if and when necessary. In a second scheme, the FH function $f_{sho}(r,T)$ used for soft-handoff users is defined to be orthogonal to or have low correlation with the FH function $f_{s_i}(k,T)$ used for users not in soft handoff in each sector s_i, so that modification of the FH function $f_{s_i}(k,T)$ is not needed. The FH function $f_{s_i}(k,T)$ for each sector may be defined to be pseudo-random with respect to the FH functions $f_{s_i}(k,T)$ for other sectors.